CLAIMS

1. A distributed speech recognition method,
comprising at least one user terminal and at least one
5   server, capable of communicating with one another via a
telecommunications network, according to which, at the
user terminal, at least the following steps are
performed:
         -obtain an audio signal to be recognized;
10   -calculate modeling parameters for the audio
signal to be recognized; and
         -attempt to associate a stored form with the
modeling parameters; and
         -independently of the step for attempting to
15   associate a stored form, transmit a signal indicating
the audio signal to be recognized to the server;
         and according to which, at the server, at least
the following steps are performed:
         -receive the signal transmitted by the user
20   terminal;
         -attempt to associate a stored form with the
         received signal.

2.   The distributed speech recognition method as
25   claimed in claim 1, according to which the signal
transmitted by the user terminal to the server is
selected from at least the audio signal to be
recognized and a signal indicating the modeling
parameters;
30   according to which, if the received signal is of
the audio type, the server calculates modeling
parameters for the received audio signal and attempts
to associate a stored form with the modeling parameters
of the received audio signal;
35   and according to which, if the received signal
indicates modeling parameters, the server attempts to
associate a stored form with said modeling parameters.

3.   The method as claimed in either of claim 1 and

claim 2, according to which obtaining the signal to be recognized at the terminal comprises a voice activation detection in order to produce the audio signal to be recognized in the form of speech segments extracted
5   from an original audio signal outside of periods without voice activity.

4.   The method as claimed in claim 3, according to which the transmitted signal is a signal selected from
10   amongst at least the original audio signal, the audio signal to be recognized in the form of segments extracted after voice detection and the signal indicating the modeling parameters.

15   5.   The method as claimed in claims 2 to 4, according to which, when the received signal is of the audio type:
      - if the received audio signal is in the form of speech segments extracted after voice detection, the
20   server calculates modeling parameters for the received signal and attempts to associate a stored form with the modeling parameters of the received audio signal;
      - otherwise, the server performs a voice activation detection applied to the received audio
25   signal in order to produce an audio signal in the form of speech segments extracted from the received audio signal outside of periods without voice activity, then calculates modeling parameters for the audio signal and attempts to associate a stored form with the modeling
30   parameters.

6.   The method as claimed in any one of the preceding claims, according to which the associated stored form determined at the terminal is chosen, when this
35   associated form exists.

7.   The method as claimed in claims 1 to 5 according

to which the associated stored form determined the quickest is chosen.

8.   The method as claimed in claims 1 to 5 according to which the associated stored form judged best according to a defined selection criterion is chosen.

9.   A user terminal for implementing a distributed speech recognition method as claimed in one of claims 1 to 8, comprising:

- means for obtaining an audio signal to be recognized;

- means for calculating modeling parameters for the audio signal; and

- control means for selecting a signal to be transmitted to the server from between the audio signal to be recognized and a signal indicating the calculated modeling parameters;

- recognition means for associating at least one stored form with modeling parameters calculated by the calculation means.

10.   The user terminal as claimed in claim 9 wherein the means for obtaining the audio signal to be recognized comprise means for detecting voice activity in order to produce the signal to be recognized in the form of speech segments extracted from an original audio signal, outside of periods without voice activity.

11.   The user terminal as claimed in claim 10 wherein the control means are designed to select at least one signal to be transmitted to the server from amongst the original audio signal, the audio signal to be recognized in the form of the speech segments extracted by the voice activation detection means and the signal indicating the calculated modeling parameters.

12. The user terminal as claimed in claims 9 to 11, wherein at least one part of the parameter calculation means and of the recognition means is downloaded from
5 the server.

13. The user terminal as claimed in claims 9 to 12, comprising means for determining the stored form to be chosen between the stored forms determined at the
10 terminal and at the server, respectively.

14. A server for implementing a distributed speech recognition method as claimed in one of claims 1 to 8 comprising:
15   - means for receiving a signal coming from a user terminal and selected at said terminal; and
          - recognition means for associating at least one stored form with modeling parameters at the input.

20 15. The server as claimed in claim 14 also comprising:
          - means for calculating modeling parameters for an input signal;
          - control means for controlling the calculation means and the recognition means in order to:
25   • when the signal received by the reception means is of the audio type, activate the parameter calculation means by addressing the selected signal to them as input signal, and address the parameters calculated by the calculation means to the recognition
30 means as input parameters, and
          • when the selected signal received by the reception means indicates modeling parameters, address said indicated parameters to the recognition means as input parameters.
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16. The server as claimed in claim 15 also comprising means for detecting activity in order to produce the

signal to be recognized in the form of speech segments extracted from an original audio signal outside of periods without voice activity and wherein the control means are designed to control the parameter calculation

5   means and the recognition means when the received signal is of the audio type in order to:

• if the received signal of the audio type is in the form of speech segments after voice activation detection, activate the parameter calculation means by

10   addressing the received signal to them as input signal, then address the parameters calculated by the parameter calculation means to the recognition means as input parameters;

• otherwise, activate the server voice

15   activation detection means by addressing the received signal to them as input signal, then address the segments extracted by the voice activation detection means to the parameter calculation means as input parameters, then address the parameters calculated by

20   the parameter calculation means to the recognition means as input parameters.

17.   The server as claimed in one of claims 14 to 16, comprising means for downloading voice recognition

25   software resources via the telecommunications network onto a terminal.

18.   The server as claimed in claim 17, wherein said resources comprise at least one module from amongst: a

30   VAD module, a module for calculating modeling parameters for an audio signal and a recognition module for associating at least one stored form with modeling parameters.

35   19.   The server as claimed in claims 14 to 18, comprising means for determining the stored form to be chosen between the stored forms determined at the

terminal and at the server, respectively.